ID-COOLING FROSTFLOW X 240 Snow

ID-COOLING FROSTFLOW X 240 Snow CPU Liquid Cooler User Manual

Model: FROSTFLOW X 240 Snow

Brand: ID-COOLING

1. Introduction

This manual provides comprehensive instructions for the installation, operation, and maintenance of your ID-COOLING FROSTFLOW X 240 Snow CPU Liquid Cooler. This All-In-One (AIO) liquid cooling system is designed to provide efficient heat dissipation for your Central Processing Unit (CPU), ensuring stable performance and longevity. Please read this manual thoroughly before proceeding with installation to ensure correct setup and optimal performance.

Image 1: The ID-COOLING FROSTFLOW X 240 Snow CPU Liquid Cooler, featuring a white radiator, two 120mm PWM fans, and a white LED pump block.

2. Safety Information

- Always disconnect power from your computer before installing or servicing any components.
- Handle components with care to avoid damage.
- Keep the product away from moisture and extreme temperatures.
- Ensure all connections are secure before powering on the system.
- Do not attempt to open or modify the liquid cooler unit, as this may void the warranty and cause damage.

3. Package Contents

Verify that all components are present in the package:

- 1x FROSTFLOW X 240 Snow CPU Liquid Cooler (Radiator, Pump, Tubing)
- 2x 120mm PWM Fans
- Intel Mounting Kit (Backplate, Standoffs, Screws for LGA2066/2011/1151/1150/1155/1156/1200/1700)

- AMD Mounting Kit (Backplate, Standoffs, Screws for AM4/AM5)
- Thermal Paste
- Fan Splitter Cable
- User Manual

4. Specifications

Feature	Specification
Product Dimensions	4.72"L x 0.98"W x 4.72"H (Fan)
Weight	2 Pounds
Brand	ID-COOLING
Power Connector Type	4-Pin
Voltage	12 Volts
Cooling Method	Water
Compatible Devices	Desktop (Intel LGA2066/2011/1151/1150/1155/1156/1200/1700, AMD AM4/AM5)
Noise Level	35.2 Decibels
Material	Polycarbonate
Maximum Rotational Speed	1800 RPM
Air Flow Capacity	76.16 Cubic Feet Per Minute

5. Setup and Installation

Follow these steps to install your FROSTFLOW X 240 Snow liquid cooler. Refer to your motherboard and PC case manuals for specific details on component placement and cable routing.

5.1 Prepare Your System

1. **Power Off:** Shut down your computer and disconnect the power cable from the wall outlet.
2. **Access:** Open your PC case to access the motherboard and CPU area.
3. **Clean CPU:** If replacing an existing cooler, carefully remove it and clean any old thermal paste from the CPU's Integrated Heat Spreader (IHS) using isopropyl alcohol and a lint-free cloth.

5.2 Install Radiator and Fans

The FROSTFLOW X 240 Snow features a 240mm radiator and two 120mm PWM fans for optimal heat dissipation.

Image 2: The 240mm radiator and pump unit, designed for efficient heat transfer.

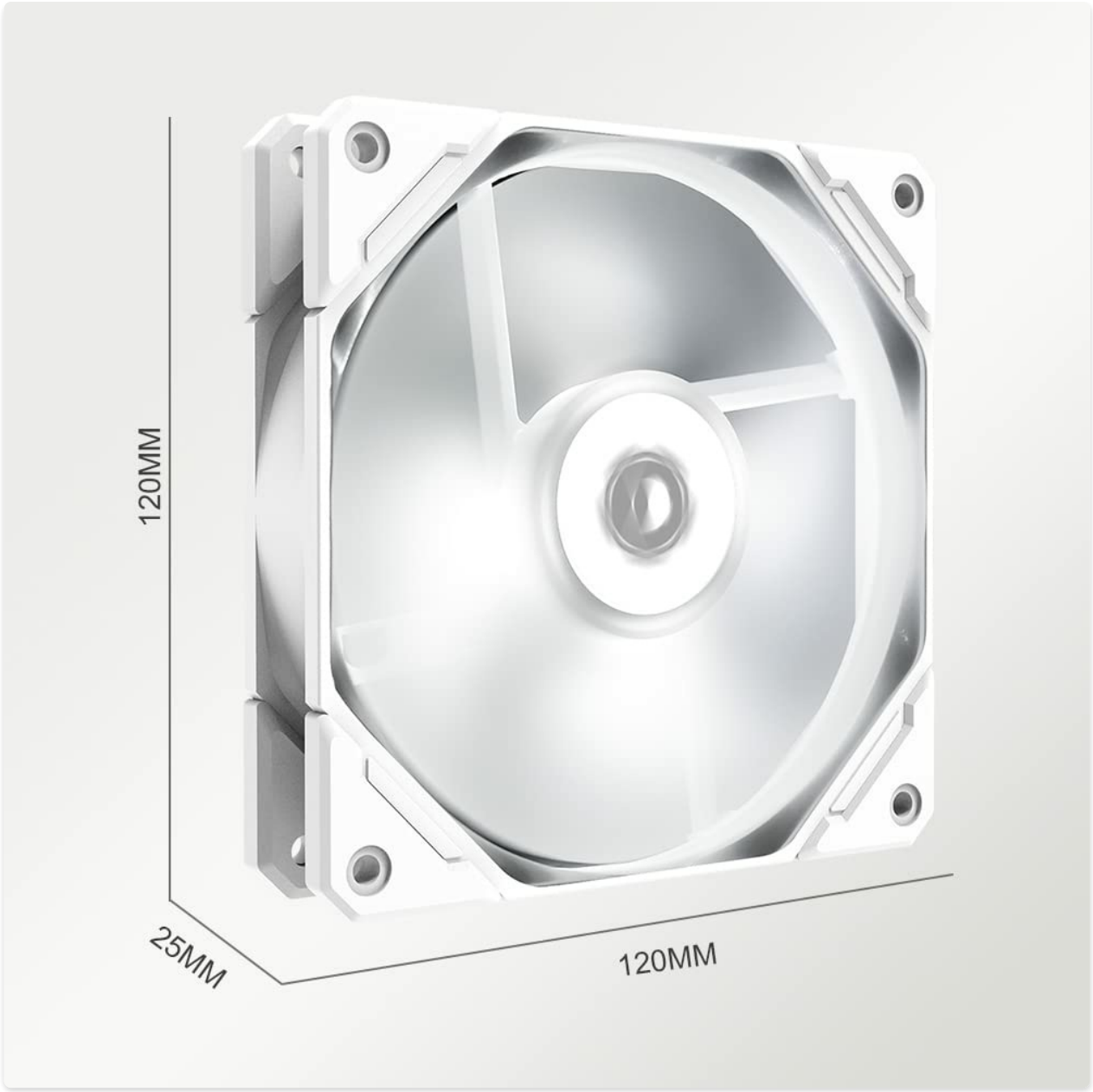

Image 3: Dimensions of the 120mm PWM fan (120mm x 120mm x 25mm).

1. **Attach Fans:** Secure the two 120mm PWM fans to the radiator using the provided screws. Ensure the fan airflow direction is appropriate for your case (typically exhausting air out of the case).
2. **Mount Radiator:** Install the radiator assembly into your PC case. Common mounting locations include the top or front of the case. Use the appropriate screws to secure it firmly.

5.3 Install CPU Water Block

The water block includes a white LED for visual appeal.

Image 4: Close-up of the pump block, highlighting the white LED illumination.

1. **Apply Thermal Paste:** Apply a small, pea-sized amount of the included thermal paste to the center of your CPU's IHS. Do not spread it manually; the pressure from the water block will distribute it evenly.
2. **Install Backplate:** For Intel sockets, install the universal backplate behind the motherboard. For AMD sockets, use the existing AMD backplate.
3. **Attach Standoffs:** Screw the appropriate standoffs into the backplate (Intel) or directly into the motherboard (AMD).
4. **Mount Water Block:** Carefully place the water block onto the CPU, aligning the mounting holes with the standoffs. Secure it with the provided thumb screws, tightening them in a diagonal pattern until snug. Do not overtighten.

5.4 Connect Cables

Proper cable management ensures optimal airflow and aesthetics.

Image 5: The liquid cooler installed in a white PC build, showcasing the white LED lighting on the fans and pump.

1. **Fan Connections:** Connect the two 120mm PWM fans to the included fan splitter cable. Then, connect the splitter cable to a 4-pin CPU_FAN or AIO_PUMP header on your motherboard.
2. **Pump Connection:** Connect the pump's 3-pin or 4-pin power cable to an available AIO_PUMP or CPU_OPT header on your motherboard. Ensure it receives full power for optimal pump operation.
3. **LED Connection:** The white LED on the pump and fans typically draws power from the same connections as the fans/pump. No separate RGB header is usually required for this model's white LED.

6. Operating Instructions

Once installed, the FROSTFLOW X 240 Snow operates automatically, adjusting fan and pump speeds based on CPU temperature via PWM control.

Image 6: Detail of a 120mm PWM fan, capable of speeds between 700-1800 RPM for precise control.

6.1 Initial Power-On

1. After reassembling your PC, connect the power cable and power on the system.
2. Observe the fans and pump for proper operation. The fans should spin, and the pump LED should illuminate.
3. Enter your motherboard's BIOS/UEFI settings to confirm that the CPU fan/pump headers are detected and configured for PWM control.

6.2 Monitoring Temperatures

Use monitoring software (e.g., HWMonitor, CPU-Z) to check your CPU temperatures during idle and load conditions. Optimal temperatures vary by CPU model, but generally, idle temperatures should be below 50°C and load temperatures below 85°C.

6.3 Low-Noise Operation

The fans are equipped with de-vibration rubber pads to minimize noise during operation.

Image 7: Close-up of the de-vibration rubber pads on the fan corners, designed to reduce operational noise.

7. Maintenance

Regular maintenance helps ensure the longevity and performance of your liquid cooler.

- **Dust Cleaning:** Periodically clean dust from the radiator fins and fan blades using compressed air. Ensure the fans are not spinning during cleaning to prevent damage.
- **Check Connections:** Occasionally inspect all cable connections (fan, pump) to ensure they are secure.
- **Tubing Inspection:** Check the tubing for any signs of kinks, leaks, or damage.

8. Troubleshooting

If you encounter issues with your liquid cooler, refer to the following common problems and solutions:

Problem	Possible Solution

Problem	Possible Solution
High CPU Temperatures	◦ Ensure the water block is securely mounted to the CPU. ◦ Verify thermal paste application. Reapply if necessary. ◦ Check fan and pump connections to the motherboard. ◦ Clean dust from the radiator fins. ◦ Confirm fan direction is correct for optimal airflow.
Fans Not Spinning / Pump Not Working	◦ Check all power connections to the fans and pump. ◦ Ensure motherboard headers are providing power (check BIOS/UEFI settings). ◦ Test fans/pump with a different header or power source if possible.
LEDs Not Lighting Up	◦ Verify all fan and pump power connections are secure. ◦ The white LEDs are integrated with the fan/pump power. If the component is working but the LED is not, contact support.
Unusual Noise from Cooler	◦ Check for loose fan screws or vibrations. ◦ Ensure cables are not interfering with fan blades. ◦ A slight gurgling sound upon initial startup is normal as air settles in the loop. If persistent, gently tilt the PC case to help trapped air move to the radiator.

If the issue persists after attempting these solutions, please contact ID-COOLING customer support.

9. Official Product Video

Watch the official product video from ID-COOLING for a visual overview of the FROSTFLOW X 240 Snow.

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Video 1: Official product overview of the ID-COOLING FROSTFLOW X 240 Snow CPU Liquid Cooler by ID-COOLING.

10. Warranty and Support

ID-COOLING products are designed for reliability and performance. This product typically comes with a manufacturer's warranty. Please refer to the warranty card included in your product packaging or visit the official ID-COOLING website for detailed warranty terms and conditions.
For technical support, troubleshooting assistance, or warranty claims, please contact ID-COOLING customer service through their official website or the contact information provided in your product documentation.
Online Resources:

- ID-COOLING Official Website: www.idcooling.com
- Product Support Page: Refer to the specific product page on the ID-COOLING website for FAQs and additional resources.